

1 **What is claimed is:**

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3 ~~1.~~ 1. Telephone answering apparatus for a subscriber of a paging system, said
4 apparatus coupled to a telephone network for automatically receiving telephone calls
5 including corresponding paging messages directed to said subscriber, such telephone
6 calls including corresponding source identifications signals generated by the telephone
7 network to identify the name and telephone numbers of the corresponding sources of
8 the telephone calls, said apparatus also coupled to a paging terminal of said paging
9 system, said paging terminal operative to transmit paging messages to a portable
10 paging receiver of said subscriber, said apparatus comprising:

11 means for storing a set of predetermined source identification codes;

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13 means coupled to the telephone network for automatically receiving telephone
14 calls directed to said subscriber and for decoding the source identification
15 signals thereof to generate corresponding decoded source identification codes;

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17 controller means coupled to said receiving means for selecting paging
18 messages of the received telephone calls based on a correlation of the
19 decoded source identification codes to said telephone calls with at least one of
20 said stored set of predetermined source identification codes;

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22 means for coupling to said paging terminal and governed by said controller
23 means to direct said selected paging messages to said paging terminal for
24 transmission to said subscriber's paging receiver wherein said paging message
25 is comprised of at least data representing the said source identification signal.

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1 2. The apparatus in claim 1 wherein said paging message is comprised of said
2 source identification signal and data representing a voice message.

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5 3. The apparatus in claim 1, including a storage means for storing said decoded
6 source identification codes and said voice message data.

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9 4. The apparatus in claim 1 including a text to speech means wherein said source
10 identification signal received and decoded is converted to stored audible voice data.

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1 5. Telephone answering apparatus for a subscriber of a paging system, said
2 apparatus coupled to a telephone network for automatically receiving telephone calls
3 including corresponding paging messages directed to said subscriber, such telephone
4 calls including corresponding audible voice source identification signals generated by
5 the telephone network to identify the telephone numbers of the corresponding sources
6 of the telephone calls, said apparatus also coupled to a paging terminal of said paging
7 system, said paging terminal operative to transmit paging messages to a portable
8 paging receiver of said subscriber, said apparatus comprising:

9
10 means coupled to the telephone network for automatically receiving telephone
11 calls directed to said subscriber and for storing the audible voice source
12 identification signals;

13
14 controller means coupled to said receiving means for selecting paging
15 messages of the received telephone calls;

16
17 means for coupling to said paging terminal and governed by said controller
18 means to direct said selected paging messages to said paging terminal for
19 transmission to said subscriber's paging receiver wherein said paging message
20 is comprised of at least audible voice data representing the said source
21 identification signal;

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1 6. The apparatus in claim 1 where source identification signals received are
2 automatically supplied from the telephone network as Automatic Number Identification
3 signals.

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6 7. The apparatus in claim 1 where source identification signals received are
7 automatically supplied from the telephone network as Caller Identification signals.

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10 8. The apparatus in claim 1 where source identification signals received are DTMF
11 signals manually entered by a calling party after an on-hook condition.

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14 9. The apparatus in claim 1 where source identification signals received are fax
15 header signals automatically sent by a calling facsimile apparatus.

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1 10. A paging system, comprising:

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3 a paging center;

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5 a telephone answering device;

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7 said telephone answering device including:

8 (a) means for receiving, via the telephone lines, a signal representative of a
9 caller's name and telephone number sent before the telephone
10 answering device is engaged in a closed loop condition;

11

12 (b) means for transmitting a prerecorded outgoing message to a caller, via
13 a closed loop of telephone lines, upon reception of an incoming
14 telephone call, and for storing a caller's voice message and the said
15 signal representative of a caller's name and telephone number whereby
16 the subscriber can obtain the caller's stored voice message and
17 associated source identification signal;

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19 (c) means for automatically, temporarily releasing the closed loop of the
20 telephone lines, and for reestablishing the closed loop of the telephone
21 lines after said voice message and source identification signal is received
22 and stored;

23

24 (d) means for calling the paging center, after said closed loop of the
25 telephone lines is reestablished; and

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27 (e) means for transmitting said stored voice message and source
28 identification signal to the paging center via the telephone lines;

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a portable receiver unit, adapted to be called by the paging center, with a display window for displaying data corresponding to said source identification signal;

whereby the subscriber through the portable receiver unit is notified of the caller's identity and can selectively retrieve the associated voice message for annunciation stored in the portable receiver unit.

1 11. A paging system, comprising:

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3 a paging center;

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5 a telephone answering device;

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7 said telephone answering device including:

8

9 (a) means for receiving, via the telephone lines, a signal representative of a
10 caller's telephone number sent before the telephone answering device
11 is engaged in a closed loop condition;

12

13 (b) means for transmitting a prerecorded outgoing message to a caller, via
14 a closed loop of telephone lines, upon reception of an incoming
15 telephone call, and for storing a caller's voice message and the said
16 signal representative of a caller's telephone number whereby the
17 subscriber can obtain the caller's stored voice message and associated
18 source identification signal;

19

20 (c) means for automatically, temporarily releasing the closed loop of the
21 telephone lines, and for reestablishing the closed loop of the telephone
22 lines after said voice message and source identification signal is received
23 and stored;

24

25 (d) means for calling the paging center, after said closed loop of the
26 telephone lines is reestablished; and

27

28 (e) means for transmitting at least said source identification signal to the
29 paging center via the telephone lines;

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1 a portable receiver unit, adapted to be called by the paging center, with a
2 display window for displaying data corresponding to said source identification signal;

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4 whereby the subscriber through the portable receiver unit is notified of the
5 caller's identity and can directly call and talk to the caller from outside the subscriber's
6 office or can directly call and listen to the voice message at said telephone answering
7 device at said subscriber's office.

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1 12. The paging system in claim 8 wherein said source of identification signals are
2 audible voice signals and said portable receiver unit contains a sound output means
3 whereby said received source identification signals may be annunciated for the called
4 subscriber.

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7 13. The paging system in claim 8 wherein is provided a means for providing a caller
8 an audible verification of the stored name and telephone number signal data received
9 prior to ending the call and means for allowing the caller to selectively replace the
10 stored caller identifying information prior to ending the call for transmission to a
11 portable receiver device.

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1 14. A method of communication information wherein said method of initiating
2 communication between a calling party and a paging network involves the steps of:
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4 providing a called party location with a caller identification and optional data
5 detection and storage means, and a communication means to initiate a communication
6 with a paging network;

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8 initiating a first communication between a calling party and a called party
9 location over a telephone network;

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11 receiving and storing at a called party location at least caller identification
12 information automatically supplied from the telephone network;

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14 receiving and storing at a called party location optional data from the calling
15 party;

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17 terminating said first communication between said calling party and said called
18 party location over said telephone network;

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20 automatically initiating a second communication between said called party
21 location and said paging network through said telephone network;

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23 automatically recalling said stored caller identification information and said
24 optional data from said called party location storage means and transmitting to said
25 paging network through said telephone network;

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27 receiving said caller identification information and said optional data at said
28 portable communication device identified in said paging network to said called party
29 subscriber.

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1 15. A method of communication information wherein said method of initiating
2 communication between a calling party and a paging network involves the steps of:
3
4 providing a called party location with a caller identification and optional data
5 detection and storage means, and a communication means to initiate a communication
6 with a paging network;
7
8 initiating a first communication between a calling party and a called party
9 location over a telephone network;
10
11 receiving and storing at a called party location at least caller identification
12 information automatically supplied from the telephone network;
13
14 receiving and storing at a called party location optional data from the calling
15 party;
16 terminating said first communication between said calling party and said called
17 party location over said telephone network;
18
19 automatically initiating a second communication between said called party
20 location and said paging network;
21
22 automatically recalling said stored caller identification information and said
23 optional data from said called party location storage means and transmitting to said
24 paging network through said telephone network;
25
26 receiving said caller identification information and said optional data at said
27 portable communication device identified in said paging network to said called party
28 subscriber.
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1 16. A method of communicating information from a calling party to a called party
2 utilizing a paging network a telephone answering apparatus and a telephone network,
3 said information including caller identification information including at least a bit string
4 representation of a telephone number for a particular telephone unit used by said
5 calling party, comprising the method steps of:

6
7 providing a portable communication device identified in said paging network to
8 said called party;

9
10 initiating communication between said calling party to said paging network
11 through said telephone network and said telephone answering apparatus;

12
13 automatically passing said caller-identification information from said telephone
14 network to said paging network without requiring entry of said caller-identification
15 information by said calling party;

16
17 transmitting to said called party portable communication device at least said
18 caller identification information from said telephone answering apparatus and said
19 paging network.

1 17. A method of communicating information from a calling party to a called party
2 utilizing a paging network a telephone answering apparatus and a telephone network,
3 said information including at least caller identification information comprised of voice
4 signal data representative of the identity said calling party, comprising the method
5 steps of:

6
7 providing a portable communication device identified in said paging network to
8 said called party;

9
10 initiating communication between said calling party to said paging network
11 through said telephone network and said telephone answering apparatus;

12
13 automatically passing said caller-identification information from said telephone
14 network to said paging network without requiring entry of said caller-identification
15 information by said calling party;

16
17 transmitting to said called party portable communication device at least said
18 caller identification information from said telephone answering apparatus and said
19 paging network.